Abstract

A method and apparatus are provided for the management of multiple-node networks to provide for efficient and rapid determination of an alternative connection path through the network to avoid a fault in the connection path. The present invention seeks to minimize the number of nodes affected by the alternative connection path by systematically seeking alternative, non-retracing connection paths from nodes neighboring the connection fault. Until an alternative connection is found, searches are conducted from nodes further from the connection fault. Optionally, the present invention may use a retracing path to establish a connection.